



**US Army Corps
of Engineers®**



Black Rock Lock and Tonawanda Harbor, NY

Harbor Features

- Located on the Niagara River in the City of Buffalo, Erie County, NY
- Authorization: Rivers & Harbor Acts of 1888, 1919, 1922, 1925, 1935, 1945, and Flood Control Act of 1954
- Deep draft commercial project
- Project depths are 21 feet in the Niagara River Channel and 16 feet in Tonawanda Harbor channels.
- The Black Rock Lock and Channel permit pleasure craft and commercial vessels to travel between Buffalo Harbor and Tonawanda Harbor.
- The Black Rock Lock can accommodate pleasure craft and commercial vessels up to 625 feet long with drafts up to 21 feet.
- 97K tons of material shipped and received in 2019
- The Bird Island Pier is approximately 2 miles long and forms the west side of the Black Rock Channel.
- Project includes 4.1-mile federal channel connecting Buffalo Outer Harbor and Black Rock Lock, a 3.4-mile federal channel downstream of the Black Rock Lock, and a 2.5-mile federal channel and turning basin around Tonawanda Island approximately 8.1-miles downstream of the Black Rock Lock.
- Major stakeholders: U.S. Coast Guard, Suit-Kote, NOCO Energy Corp., and United Refining Co.

Project Requirements

- In addition to routine operation and maintenance (O&M), critical requirements include repairs to the lower west guide wall, upper east guide wall, Bird Island Pier, motor control center, main power cabling, hydraulic cylinders and power units, and fabrication and installation of new miter gates.



- Maintenance dredging is conducted infrequently to maintain the navigation channel. The channel was last dredged in 2015.
- New upper and lower miter gates are needed. The current gates are original to the project (1914) and are well beyond fatigue life. Engineering and design of new miter gates was completed in FY20. Fabrication of the lower miter gates was initiated in FY21 and is scheduled to be completed in early FY22. Installation of the lower gates is tentatively planned for FY22. Fabrication and installation of the upper gates is tentatively planned for FY22-FY24.

Project Requirements

- Work completed in FY21 included: replacement of the hydraulic power unit pump, culvert butterfly valve cylinders, and motor control centers.

Consequences of Not Maintaining the Project

- Failure to adequately fund routine O&M could result in closure of the lock.
- Elimination of the U.S. connection to the Intercoastal Waterway from Lake Erie
- Inability for commercial and recreational vessels to reach destinations on the upper Niagara River

Transportation Importance

- Asphalt is the primary commodity shipped or received through the lock.
- With 1,318 lockages in 2020, the lock provided safe passage for 2,332 vessels (138 commercial and 2,194 recreational).
- The lock provides the only means for deep draft commercial vessels to reach delivery ports on the upper Niagara River, including fuel storage facilities and refinery.

U.S. Army Corps of Engineers Fiscal Year (FY) 2021, 2022, and 2023 Black Rock Lock and Tonawanda Harbor, NY Project Requirements and President's Budget (\$1,000)

Work Package	FY21 Requirement	FY21 Appropriation	FY22 Requirement	FY22 President's Budget	FY23 Requirement	FY23 President's Budget
Operation of Lock	1,255	1,255	1,302	1,289	1,320	0
Operational Routine Maintenance of Lock	659	659	687	680	693	0
Real Estate Management	34	34	34	34	55	0
Project Condition Surveys	32	32	33	33	34	0
Facility Security Maintenance	62	62	64	63	65	0
Motor Control Center Repair	0	0	0	0	0	0
Operational Condition Assessment	0	0	0	0	0	0
Replacement of Pintles	0	0	0	0	0	0
Lower Operating Gate Diagonal Replacement	0	0	0	0	0	0
Design Miter Gates	0	0	0	0	0	0
Fabrication Lower Miter Gates	4,500	4,500	0	0	0	0
Fabrication Upper Miter Gates	0	0	4,500	4,500	0	0
Environmental Compliance Management	0	0	5	5	5	0
Periodic Inspection	0	0	0	0	0	0
Engineering & Design Bird Island Pier Repair	250	0	250	250	0	0
Construction Bird Island Pier Repair	0	0	6,000	0	0	0
Structure Repair - Bird Island Pier	0	0	0	0	0	0
Engineering & Design Lower West Guide Wall Repair	100	0	100	100	100	0
Construction Lower West Guide Wall Repair	0	0	5,000	0	0	0
Engineering & Design Upper East Guide Wall Repair	300	0	300	300	0	0

Construction Upper East Guide Wall Repair	0	0	5,000	0	0	0
Evaluate Guard Gates and New Bulkheads	100	0	100	0	100	0
Engineering, Design, and Construction New Dewatering Bulkhead	0	0	2,000	0	0	0
Engineering and Design - Main Power Cabling Renewal	50	0	100	100	0	0
Construction - Main Power Cabling Renewal	0	0	300	0	0	0
Rehab Hydraulic Cylinders and Hydraulic Power Units	220	0	220	220	0	0
Installation of Lower Miter Gates	0	0	3,000	3,000	0	0
Installation of Upper Miter Gates	0	0	3,000	0	0	0
Other Business Lines						
Environmental Stewardship	5	5	5	5	5	0
TOTAL	7,567	6,547	32,000	10,600	2,377	TBD

Congressional Interests

- Representative Brian Higgins D-NY-26
- Senator Charles Schumer D-NY
- Senator Kirsten Gillibrand D-NY